

## t20\_jordan2b

(TMck3oiTtrqyBd88jq2Wn7AafuPHWnYGnw4)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k15\_euclid : \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $k12\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v3\_card\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $k1\_euclid : \iota \Rightarrow \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $m1\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $v6\_membered : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. ((v3\_card\_1 X1 np\_1) \wedge \\ (m2\_finseq\_1 X1 X0)) \Rightarrow (\exists X2. (m1\_subset\_1 X2 X0) \wedge (X1 = k12\_finseq\_1 \\ X0 X2))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. (v7\_ordinal1 X0) \Rightarrow (u1\_struct\_0 (k15\_euclid X0) = k1\_euclid X0) \tag{2}$$

Assume the following.

$$\begin{aligned} ((v2\_xxreal\_0 np\_1) \wedge (m2\_subset\_1 np\_1 k1\_numbers k5\_numbers)) \wedge \\ ((m1\_subset\_1 np\_1 k5\_numbers) \wedge (m1\_subset\_1 np\_1 k1\_numbers)) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. (m1\_finseq\_2 X1 X0) \Rightarrow (\forall X2. (m2\_finseq\_2 X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \tag{4}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{5}$$

Assume the following.

$$v6\_membered k4\_ordinal1 \tag{6}$$

Assume the following.

$$\neg v1\_xboole\_0 \ k1\_numbers \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_2 \ X1 \ X0) \Rightarrow (\forall X2.(m2\_finseq\_2 \ X2 \ X0 \ X1) \Rightarrow (m2\_finseq\_1 \ X2 \ X0)) \quad (8)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 \ X0) \Rightarrow (m1\_finseq\_2 \ (k1\_euclid \ X0) \ k1\_numbers) \quad (9)$$

Assume the following.

$$\forall X0.(v7\_ordinal1 \ X0) \Rightarrow (\forall X1.(m1\_subset\_1 \ X1 \ (k1\_euclid \ X0)) \Rightarrow (v3\_card\_1 \ X1 \ X0)) \quad (10)$$

Assume the following.

$$\forall X0.(v6\_membered \ X0) \Rightarrow (\forall X1.(m1\_subset\_1 \ X1 \ X0) \Rightarrow (v7\_ordinal1 \ X1)) \quad (11)$$

**Theorem 1**

$$\forall X0.(m1\_subset\_1 \ X0 \ (u1\_struct\_0 \ (k15\_euclid \ np\_1))) \Rightarrow (\exists X1.(m1\_subset\_1 \ X1 \ k1\_numbers) \wedge (X0 = k12\_finseq\_1 \ k1\_numbers \ X1))$$